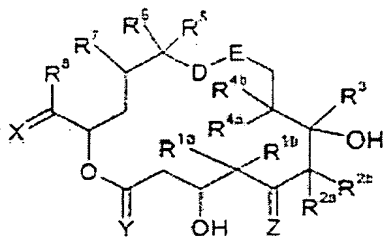


Listing of Claims:

1. (Previously Presented) An epothilone compound of formula I,



in which

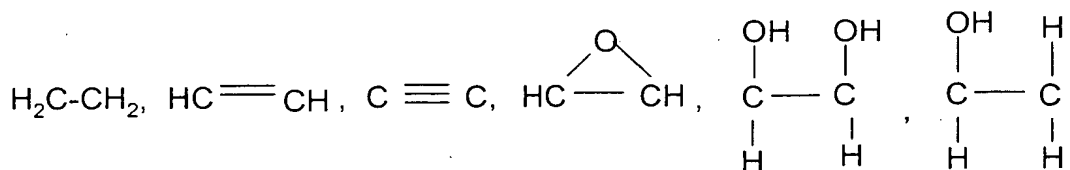
R^{1a} , R^{1b} are the same or different and mean hydrogen, C_1 - C_{10} alkyl, aryl, C_7 - C_{20} aralkyl, or together a $-(CH_2)_m$ - group with $m = 2, 3, 4$ or 5 ,

R^{2a} , R^{2b} are the same or different and mean hydrogen, C_1 - C_{10} alkyl, aryl, C_7 - C_{20} aralkyl or together a $-(CH_2)_n$ - group with $n = 2, 3, 4$ or 5 , whereby, if -D-E- stands for $-CH_2-CH_2-$ and Y stands for an oxygen atom, at least one of R^{2a} and R^{2b} is not hydrogen or methyl,

R^3 means hydrogen, C_1 - C_{10} alkyl, aryl, C_7 - C_{20} aralkyl,

R^{4a} , R^{4b} are the same or different and mean hydrogen, C_1 - C_{10} alkyl, aryl, C_7 - C_{20} aralkyl or together a $-(CH_2)_p$ - group with $p = 2, 3, 4$ or 5 ,

D-E means a group



R^5 means hydrogen, C_1 - C_{10} alkyl, aryl, C_7 - C_{20} aralkyl,

R^6 , R^7 each mean a hydrogen atom, together an additional bond or an oxygen atom,

R^8 means hydrogen, C_1 - C_{20} alkyl, aryl, C_7 - C_{20} aralkyl, which can all be substituted,

X means an oxygen atom, two alkoxy groups OR^{23} , a C_2 - C_{10} alkylene-" α,ω --dioxy group, which can be straight-chain or branched, H/OR^9 or a grouping $CR^{10}R^{11}$, whereby

R^{23} stands for a C_1 - C_{20} alkyl radical,

R^9 stands for hydrogen or a protective group PG^x ,

R^{10} , R^{11} are the same or different and stand for:

hydrogen;

a C_1 - C_{20} alkyl radical;

a substituted or unsubstituted phenyl, naphthyl, furyl, thienyl, pyridyl, pyrazolyl, pyrimidinyl, oxazolyl, pyridazinyl, pyrazinyl, quinolyl or thiazolyl radical; or

a C_7 - C_{20} aralkyl radical; or

R^{10} and R^{11} together with the methylene carbon atom together stand for a 5- to 7-membered carbocyclic ring,

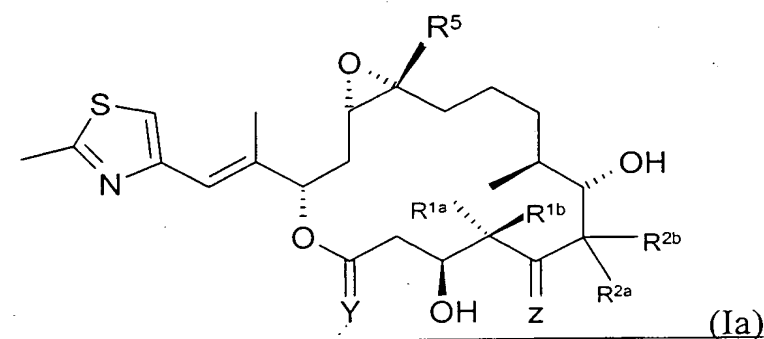
Y means an oxygen atom or two hydrogen atoms,

Z means an oxygen atom or H/OR^{12} ,

whereby

R^{12} means hydrogen or a protective group PG^z .

2. (Currently Amended) An epothilone compound of formula-Ia



~~according to claim 1, in which Y, Z, R^{1a}, R^{1b}, R^{2a} and R^{2b} all have the meanings that are indicated in formula I, and~~

~~R³ is H,~~

~~one R^{4a} and R^{4b} is H and the other is methyl,~~

~~D-E is H₂C-CH₂,~~

~~X is CR¹⁰R¹¹~~

~~wherein one of R¹⁰ and R¹¹ is H and the other is 2-methyl-4-thiazolyl,~~

~~R⁵ is H or CH₃,~~

~~R⁶ and R⁷ together an O,~~

~~and~~

~~R⁸ is H~~

~~in which~~

~~R^{1a}, R^{1b} are the same or different and mean hydrogen, C₁-C₁₀ alkyl, aryl, C₇-C₂₀ aralkyl, or together a -(CH₂)_m- group with m = 2, 3, 4 or 5,~~

~~R^{2a}, R^{2b} are the same or different and mean hydrogen, C₁-C₁₀ alkyl, aryl, C₇-C₂₀ aralkyl or together a -(CH₂)_n- group with n = 2, 3, 4 or 5, whereby, if Y stands for an oxygen atom, at least one of R^{2a} and R^{2b} is not hydrogen or methyl,~~

~~R⁵ is H or CH₃~~

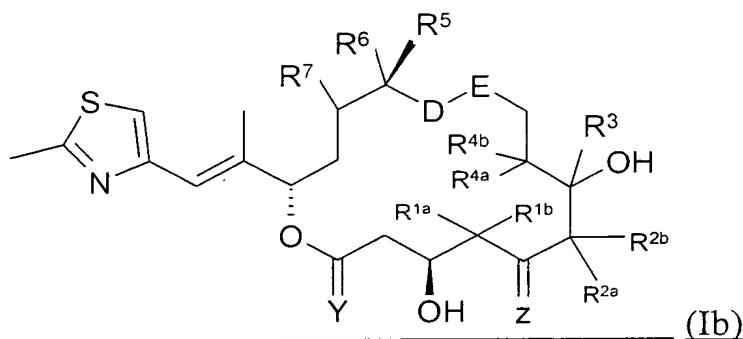
~~Y means an oxygen atom or two hydrogen atoms, and~~

~~Z means an oxygen atom or H/OR¹².~~

3. (Canceled)

4. (Canceled)

5. (Currently amended) An epothilone compound of formula I-Ib



in which

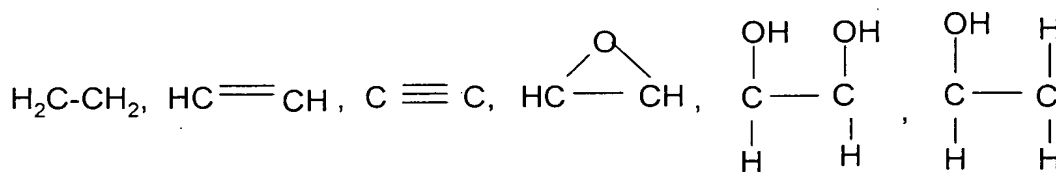
R^{1a} , R^{1b} are the same or different and mean hydrogen, C_1 - C_{10} alkyl, aryl, C_7 - C_{20} aralkyl, or together a $-(CH_2)_m$ - group with $m = 2, 3, 4$ or 5 ,

R^{2a} , R^{2b} are the same or different and mean hydrogen, C_1 - C_{10} alkyl, aryl, C_7 - C_{20} aralkyl or together a $-(CH_2)_n$ - group with $n = 2, 3, 4$ or 5 , whereby, if -D-E- stands for $-CH_2-CH_2-$ and Y stands for an oxygen atom, at least one of R^{2a} and R^{2b} is not hydrogen or methyl,

R^3 means hydrogen, C_1 - C_{10} alkyl, aryl, C_7 - C_{20} aralkyl,

R^{4a} , R^{4b} are the same or different and mean hydrogen, C_1 - C_{10} alkyl, aryl, C_7 - C_{20} aralkyl or together a $-(CH_2)_p$ - group with $p = 2, 3, 4$ or 5 ,

D-E means a group



R^5 means hydrogen, C_1 - C_{10} alkyl, aryl, C_7 - C_{20} aralkyl,

R^6 , R^7 each mean a hydrogen atom, together an additional bond or an oxygen atom,

Y means an oxygen atom or two hydrogen atoms, and

Z means an oxygen atom or H/OR^{12}

according to claim 1, in which ~~Y, Z, R^{1a}, R^{1b}, R^{2a}, R^{2b}, R³, R^{4a}, R^{4b}, D-E, R⁵, R⁶ and R⁷~~
all have the meanings that are indicated in formula I, and

~~R⁸ is H~~

and

~~X is CR⁺¹⁰R⁺¹¹~~

~~wherein one of R⁺¹⁰ and R⁺¹¹ is H and the other is 2-methyl-4-thiazolyl.~~

6. (Previously Presented) An epothilone compound of formula I according to claim 1, in which Y, Z, R^{1a}, R^{1b}, R^{2a}, R^{2b}, R⁶, R⁷, R⁸ and X all have the meanings that are indicated in formula I, and

R³ is H,

one R^{4a} and R^{4b} is H and the other is methyl,

R⁵ is H or methyl

and

D-E is H₂C-CH₂.

7. (Canceled)

8. (Previously Presented) A compound of formula I, namely

(4S,7R,8S,9S,13(Z),16S(E))-4,8-Dihydroxy-7-ethyl-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-5,5,9,13-tetramethyl-cyclohexadec-13-ene-2,6-dione,

(4S,7R,8S,9S,13E,16S(E))-4,8-dihydroxy-7-ethyl-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-5,5,9,13-tetramethyl-cyclohexadec-13-ene-2,6-dione (B),

(1S,3S(E),7S,10R,11S,12S,16R)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-10-ethyl-8,8,12,16-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione ,

(1R,3S(E),7S,10R,11S,12S,16S)-7,11-dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-10-ethyl-8,8,12,16-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(1S,3S(E),7S,10R,11S,12S,16S)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-10-ethyl-8,8,12,16-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione ,

(1R,3S(E),7S,10R,11S,12S,16R)-7,11-dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-10-ethyl-8,8,12,16-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(4S,7S,8R,9S,13Z,16S(E))-4,8-Dihydroxy-7-ethyl-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-5,5,9,13-tetramethyl-cyclohexadec-13-ene-2,6-dione,

(4S,7S,8R,9S,13E,16S(E))-4,8-dihydroxy-7-ethyl-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-5,5,9,13-tetramethyl-cyclohexadec-13-ene-2,6-dione,

(1S,3S(E),7S,10S,11R,12S,16R)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-10-ethyl-8,8,12,16-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(1R,3S(E),7S,10S,11R,12S,16S)-7,11-dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-10-ethyl-8,8,12,16-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(1S,3S(E),7S,10S,11R,12S,16R)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-10-ethyl-8,8,12,16-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(1R,3S(E),7S,10S,11R,12S,16S)-7,11-dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-10-ethyl-8,8,12,16-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(4S,7R,8S,9S,13(E or Z),16S(E))-4,8-Dihydroxy-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-7-phenyl-5,5,9,13-tetramethyl-cyclohexadec-13-ene-2,6-dione,

(1(S or R),3S(E),7S,10R,11S,12S,16R)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-10-phenyl-8,8,12,16-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(1R or S),3S(E),7S,10R,11S,12S,16S)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-10-phenyl-8,8,12,16-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(4S,7R,8S,9S,13(E or Z),16S(E))-7-Benzyl-4,8-dihydroxy-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-5,5,9,13-tetramethyl-cyclohexadec-13-ene-2,6-dione,

(1(S or R),3S(E),7S,10R,11S,12S,16R)-10-Benzyl-7,11-dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,12,16-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(1R or S),3S(E),7S,10R,11S,12S,16S)-10-Benzyl-7,11-dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,12,16-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(4S,7R,8S,9S,11E/Z,13(E or Z),16S(E))-4,8-Dihydroxy-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-5,5,7,9,13-pentamethyl-cyclohexadec-11,13-diene-2,6-dione,

(1(S or R),3S(E),7S,10R,11S,12S,14E/Z,16R)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,12,16-pentamethyl-4,17-dioxabicyclo[14.1.0]heptadec-14-ene-5,9-dione,

(1R or S),3S(E),7S,10R,11S,12S,14E/Z,16S)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,12,16-pentamethyl-4,17-dioxabicyclo[14.1.0]heptadec-14-ene-5,9-dione,

(4S,7R,8S,9S,13(E or Z),16S(E))-4,8-Dihydroxy-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-5,5,7,9,13-pentamethyl-cyclohexadec-13-ene-11-ene-2,6-dione,

(1(S or R),3S(E),7S,10R,11S,12S,16R)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,12,16-pentamethyl-4,17-dioxabicyclo[14.1.0]heptadec-14-ene-5,9-dione,

(1R or S),3S(E),7S,10R,11S,12S,16S)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,12,16-pentamethyl-4,17-dioxabicyclo[14.1.0]heptadec-14-ene-5,9-dione,

(4S,7R,8S,9S,11E/Z,13(E or Z),16S(E))-4,8-Dihydroxy-13-ethyl-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-5,5,7,9-tetramethyl-cyclohexadec-11,13-diene-2,6-dione,

(1(S or R),3S(E),7S,10R,11S,12S,14E/Z,16R)-7,11-Dihydroxy-16-ethyl-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,12-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadec-14-ene-5,9-dione,

(1R or S),3S(E),7S,10R,11S,12S,14E/Z,16S)-7,11-Dihydroxy-16-ethyl-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,12-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadec-14-ene-5,9-dione,

(4S,7R,8S,9S,11E/Z,13(E or Z),16S(E))-4,8-Dihydroxy-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-13-propyl-5,5,7,9-tetramethyl-cyclohexadec-11,13-diene-2,6-dione,

(1(S or R),3S(E),7S,10R,11S,12S,14E/Z,16R)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-16-propyl-8,8,10,12-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadec-14-ene-5,9-dione,

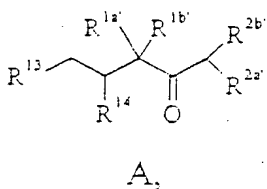
(1R or S),3S(E),7S,10R,11S,12S,14E/Z,16S)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-16-propyl-8,8,10,12-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadec-14-ene-5,9-dione,

(1(S or R),3S(E),7S,10R,11S,12S,16R)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,12,16-pentamethyl-4,17-dioxabicyclo[14.1.0]heptadec-9-one, or

(1R or S),3S(E),7S,10R,11S,12S,16S)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,12,16-pentamethyl-4,17-dioxabicyclo[14.1.0]heptadec-9-one.

9. (Previously Presented) A process for the production of an epothilone compound according to claim 1

reacting a fragment of general formula A



in which

$R^{1a'}$, $R^{1b'}$, $R^{2a'}$ and $R^{2b'}$ have the meanings already mentioned for R^{1a} , R^{1b} , R^{2a} and R^{2b} ,

R^1 means CH_2OR^{13a} , CH_2-Hal , CHO , CO_2R^{13b} , $COHal$,

R^1 means hydrogen, OR^{14a} , Hal , OSO_2R^{14b} ,

R^{13a} , R^{14a} mean hydrogen, SO_2 -alkyl, SO_2 -aryl, SO_2 -aralkyl or together a $-(CH_2)_o$ group or together a $CR^{15a}R^{15b}$ group,

R^{13b} , R^{14b} mean hydrogen, C_1 - C_{20} alkyl, aryl, C_1 - C_{20} aralkyl,

R^{15a} , R^{15b} are the same or different and mean hydrogen, C_1 - C_{10} alkyl, aryl, C_7 - C_{20} aralkyl or together a $-(CH_2)_q$ -group,

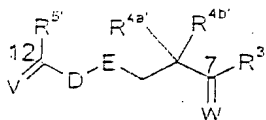
Hal means halogen,

o means 2 to 4,

q means 3 to 6,

including all stereoisomers as well as their mixtures, and

free hydroxyl groups in R^{13} and R^{14} can be etherified or esterified, free carbonyl groups can be ketalized in A and R^{13} , converted into an enol ether or reduced, and free acid groups in A can be converted into their salts with bases, with a fragment of general formula B



B

in which

$R^{3'}$, $R^{4a'}$, $R^{4b'}$ and $R^{5'}$ have the meanings already mentioned for R^3 , R^{4a} , R^{4b} and R^5 ,

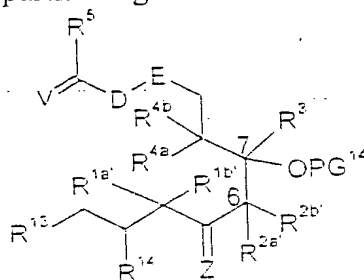
V means an oxygen atom, two alkoxy groups OR^{17} , a C_2 - C_{10} alkylene- α,ω --dioxy group, which can be straight-chain or branched or H/OR^{16} ,

W means an oxygen atom, two alkoxy groups OR^{19} , a C_2 - C_{10} alkylene- α,ω --dioxy group, which can be straight-chain or branched or H/OR^{18} ,

R^{16} , R^{18} , independently of one another, mean hydrogen or a protective group PG^1

R^{17} , R^{19} , independently of one another, mean C_1 - C_{20} alkyl,

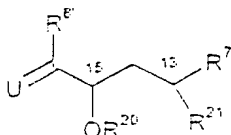
to a form a compound of partial fragment of formula AB



AB,

in which $R^{1a'}$, $R^{1b'}$, $R^{2a'}$, $R^{2b'}$, R^3 , R^{4a} , R^{4b} , R^5 , R^{13} , R^{14} , D, E, V and Z have the meanings already mentioned, and PG^{14} represents a hydrogen atom or a protective group PG, and,

reacting this compound of partial fragment AB is reacted with a fragment of general formula C



C

in which

$R^{8'}$ has the meaning already mentioned in general formula I for R^8 , and

$R^{7'}$ means a hydrogen atom,

R^{20} means a hydrogen atom or a protective group PG^2 ,

R^{21} means a hydroxy group, halogen, a protected hydroxy group OPG^3 , a phosphonium halide radical $PPh_3^+Hal^-$ (Ph = phenyl; Hal = F, Cl, Br, I), a phosphonate

radical $P(O)(OQ)_2$ ($Q = C_1-C_{10}$ alkyl or phenyl) or a phosphine oxide radical $P(O)Ph_2$ ($Ph = \text{phenyl}$),

U means an oxygen atom, two alkoxy groups OR^{23} , a C_2-C_{10} alkylene- α,ω -dioxy group, which can be straight-chain or branched, H/OR^9 or a grouping $CR^{10}R^{11}$,

whereby

R^{23} stands for a C_1-C_{20} alkyl radical,

R^9 stands for hydrogen or a protective group PG^3 ,

R^{10} , R^{11} are the same or different and stand for:

hydrogen;

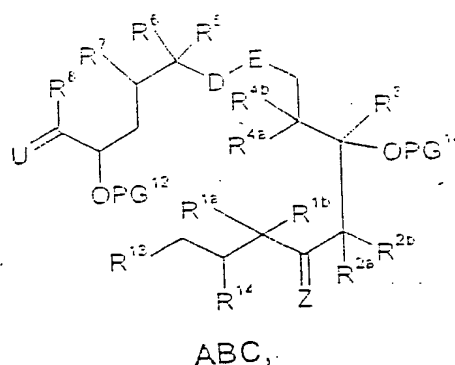
a C_1-C_{20} alkyl radical;

a substituted or unsubstituted phenyl, naphthyl, furyl, thienyl, pyridyl, pyrazolyl, pyrimidinyl, oxazolyl, pyridazinyl, pyrazinyl, quinolyl or thiazolyl radical; or

a C_7-C_{20} aralkyl radical or

R^{10} and R^{11} together with the methylene carbon atoms together stand for a 5- to 7-membered carbocyclic ring,

to obtain a compound of a partial fragment of formula ABC

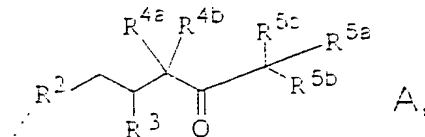


in which $R^{1a'}$, $R^{1b'}$, $R^{2a'}$, $R^{2b'}$, R^3 , R^{4a} , R^{4b} , R^5 , R^6 , R^7 , R^8 , R^{13} , R^{14} , D, E, U and Z have the meanings already mentioned, and this compound of partial fragment of formula ABC is cyclized to an epothilone derivative of general formula I.

10. (Previously Presented) A pharmaceutical composition comprising a therapeutically effective amount of at least one compound of general formula I according to claim 1, as well as a pharmaceutically compatible vehicle.

11. (Previously Presented) A method for the production of a pharmaceutical agent comprising mixing a therapeutically effective amount of a compound of formula I according to claim 1, together with a pharmaceutically compatible vehicle.

12. (Previously Presented) A process for the production of a compound of formula A



in which

R^2 means CH_2OR^{2a} , CHO , CO_2R^{2b} , COX ,

R^{2a} , R^{2b} mean hydrogen, C_1 - C_{20} alkyl, aryl, C_7 - C_{20} aralkyl,

R^3 means hydrogen, OR^{3a} , X , OSO_2R^{3b} ,

R^{3a} means hydrogen or together with R^{2a} a $-(CH_2)_n$ - group or a $CR^{6a}R^{6b}$

group,

R^{3b} means C_1 - C_4 alkyl, aryl,

X means halogen,

n means 2 to 4,

R^{6a} , R^{6b} are the same or different and mean C_1 - C_8 alkyl, C_6 - C_{10} aryl

or together a $-(CH_2)_o$ - group,

o means 3 to 6,

R^{6a} additionally can assume the meaning of hydrogen,

R^{4a} , R^{4b} are the same or different and mean hydrogen, C_1 - C_{10} alkyl, C_7 - C_{20} aralkyl

or together a $-(CH_2)_m$ - group,

m means 2 to 5

R^{5a} , R^{5b} are the same or different and mean hydrogen, C_1 - C_{10} alkyl, C_7 - C_{20} aralkyl

or together a $-(CH_2)_p$ - group,

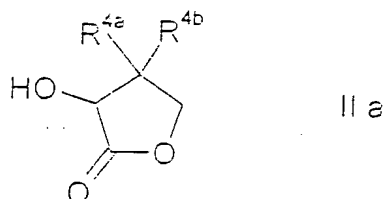
p means 2 to 5

R^{5c} means hydrogen,

including all stereoisomers and mixtures thereof, and

free hydroxyl groups can be etherified or esterified in R^2 and R^3 , free carbonyl groups can be ketalized in A and R^2 , converted into an enol ether or reduced, and free acid groups in A can be converted into their salts with bases, wherein

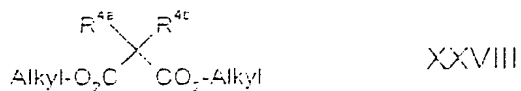
a) a pantolactone of formula IIa or



in which

R^{4a} and R^{4b} in each case are methyl groups or

b) a malonic acid dialkyl ester of formula XXVIII



in which

R^{4a} , R^{4b} , which have the meaning that is indicated in formula A, and alkyl, independently of one another, mean a C_1 - C_{20} alkyl, C_3 - C_{10} cycloalkyl or C_4 - C_{20} alkylcycloalkyl radical, is used as a starting product.

13-30. (Canceled)

31. (Previously Presented) A compound of claim 1, in which

R^{2a} , R^{2b} are the same or different and mean hydrogen, C_1 - C_{10} alkyl, aryl, C_7 - C_{20} aralkyl or together a $-(CH_2)_n-$ group with $n = 2, 3, 4$ or 5 ,

whereby, if -D-E- stands for

$-CH_2-CH_2-$ or Y stands for an oxygen atom, then R^{2a} and R^{2b} cannot be hydrogen or C_1 - C_{10} alkyl.

32. (Previously Presented) A compound which is:

(4S,7R,8S,9S,13(Z),16S(E))-4,8-Dihydroxy-5,5,7,9,13-pentamethyl-16-((3-pyridyl)ethenyl)-1-oxa-cyclohexadec-13-ene-2,6-dione,

(4S,7R,8S,9S,13E,16S(E))-4,8-dihydroxy-5,5,7,9,13-pentamethyl-16-((3-pyridyl)ethenyl)-1-oxa-cyclohexadec-13-ene-2,6-dione,

(1S,3S(E),7S,10R,11S,12S,16R)-7,11-Dihydroxy-8,8,10,12,16-pentamethyl-3-((3-pyridyl)ethenyl)-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(1S,3S(E),7S,10R,11S,12S,16S)-7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-((3-pyridyl)ethenyl)-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(4S,7R,8S,9S,13(Z),16S(E))-4,8-Dihydroxy-5,5,7,9,13-pentamethyl-16-((4-pyridyl)ethenyl)-1-oxa-cyclohexadec-13-ene-2,6-dione,

(4S,7R,8S,9S,13E,16S(E))-4,8-dihydroxy-5,5,7,9,13-pentamethyl-16-((4-pyridyl)ethenyl)-1-oxa-cyclohexadec-13-ene-2,6-dione,

(1S,3S(E),7S,10R,11S,12S,16R)-7,11-Dihydroxy-8,8,10,12,16-pentamethyl-3-((4-pyridyl)ethenyl)-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(1S,3S(E),7S,10R,11S,12S,16S)-7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-((4-pyridyl)ethenyl)-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(4S,7R,8S,9S,13(E or Z),16S(E))-4,8-Dihydroxy-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-5,5,7,13-tetramethyl-9-trifluoromethyl-cyclohexadec-13-ene-2,6-dione,

(1(S or R),3S(E),7S,10R,11S,12S,16R)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,16-tetramethyl-12-trifluoromethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(1R or S),3S(E),7S,10R,11S,12S,16S)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,16-tetramethyl-12-trifluoromethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(1R or S),3S(E),7S,10R,11S,12S,16S)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,12,16-pentamethyl-4,17-dioxabicyclo[14.1.0]heptadec-14-ene-5,9-dione

(4S,7R,8S,9S,13(E or Z),16S(E))-4,8-Dihydroxy-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-5,5,7,9-tetramethyl-13-trifluoromethyl-cyclohexadec-13-ene-2,6-dione,

(1(S or R),3S(E),7S,10R,11S,12S,16R)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,12-tetramethyl-16-trifluoromethyl-4,17-dioxabicyclo[14.1.0]heptadeca-5,9-dione,

(1R or S),3S(E),7S,10R,11S,12S,16S)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8,10,12-tetramethyl-16-trifluoromethyl-4,17-dioxabicyclo[14.1.0]heptadeca-5,9-dione,

(4S,7R,8S,9S,13(E or Z),16S(E))-4,8-Dihydroxy-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-13-pentafluoroethyl-5,5,7,9-tetramethyl-cyclohexadec-13-ene-2,6-dione,

(1(S or R),3S(E),7S,10R,11S,12S,16R)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-16-pentafluoroethyl-8,8,10,12-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadeca-5,9-dione,

(1R or S),3S(E),7S,10R,11S,12S,16S)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-16-pentafluoroethyl-8,8,10,12-tetramethyl-4,17-dioxabicyclo[14.1.0]heptadeca-5,9-dione,

(4S,7R,8S,9S,13(E or Z),16S(E))-4,8-Dihydroxy-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-5,5-(1,3-trimethylene)-7,9,13-trimethyl-cyclohexadec-13-ene-2,6-dione,

(1(S or R),3S(E),7S,10R,11S,12S,16R)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8-(1,3-trimethylene)-10,12,16-trimethyl-4,17-dioxabicyclo[14.1.0]heptadeca-5,9-dione,

(1R or S),3S(E),7S,10R,11S,12S,16S)-7,11-Dihydroxy-3-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-8,8-(1,3-trimethylene)-10,12,16-trimethyl-4,17-dioxabicyclo[14.1.0]heptadeca-5,9-dione,

(4S,7R,8S,9S,13(E or Z),16S(E))-4,8-Dihydroxy-16-(1-methyl-2-(2-pyridyl)ethenyl)-1-oxa-5,5,7,9,13-pentamethyl-cyclohexadec-13-ene-2,6-dione,

(1(S or R),3S(E),7S,10R,11S,12S,16R)-7,11-Dihydroxy-3-(1-methyl-2-(2-pyridyl)ethenyl)-8,8,10,12,16-pentamethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(1R or S),3S(E),7S,10R,11S,12S,16S)-7,11-Dihydroxy-3-(1-methyl-2-(2-pyridyl)ethenyl)-8,8,10,12,16-pentamethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(4S,7R,8S,9S,13(E or Z),16S(E))-4,8-Dihydroxy-16-(1-methyl-2-(4-pyridyl)ethenyl)-1-oxa-5,5,7,9,13-pentamethyl-cyclohexadec-13-ene-2,6-dione,

(1(S or R),3S(E),7S,10R,11S,12S,16R)-7,11-Dihydroxy-3-(1-methyl-2-(4-pyridyl)ethenyl)-8,8,10,12,16-pentamethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,

(1R or S),3S(E),7S,10R,11S,12S,16S)-7,11-Dihydroxy-3-(1-methyl-2-(4-pyridyl)ethenyl)-8,8,10,12,16-pentamethyl-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione,
or

(4S,7R,8S,9S,13(E or Z),16S(E))-4,8-Dihydroxy-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-5,5,7,9,13-pentamethyl-cyclohexadec-13-en-6-one.